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10/501,022	07/09/2004	Shigeto Ueno	L8462.04121	3051

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EXAMINER

RENNER, CRAIG A

ART UNIT

PAPER NUMBER

2627

DATE MAILED: 11/03/2006

Please find below and/or attached an Office communication concerning this application or proceeding.

Office Action Summary

Application No.

10/501,022

Applicant(s)

UENO ET AL.

Examiner

Craig A. Renner

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-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on 10 August 2006.
- 2a) ☐ This action is **FINAL**. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 1-62 is/are pending in the application.
- 4a) Of the above claim(s) 2-4, 7-27, 49, 52-54 and 56-62 is/are withdrawn from consideration.
- 5) ☐ Claim(s) _____ is/are allowed.
- 6) ☒ Claim(s) 1, 5, 6, 28-33, 35, 41-43, 46 and 47 is/are rejected.
- 7) ☒ Claim(s) 34, 36-40, 44, 45, 48, 50, 51 and 55 is/are objected to.
- 8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☒ The specification is objected to by the Examiner.
- 10) ☒ The drawing(s) filed on 09 July 2004 is/are: a) ☒ accepted or b) ☐ objected to by the Examiner.
- Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
- Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) ☒ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☒ All b) ☐ Some * c) ☐ None of:
- ☐ Certified copies of the priority documents have been received.
 - ☐ Certified copies of the priority documents have been received in Application No. _____.
 - ☒ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- | | |
|--|---|
| 1) <input checked="" type="checkbox"/> Notice of References Cited (PTO-892) | 4) <input type="checkbox"/> Interview Summary (PTO-413) |
| 2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948) | Paper No(s)/Mail Date. _____ |
| 3) <input checked="" type="checkbox"/> Information Disclosure Statement(s) (PTO/SB/08) | 5) <input type="checkbox"/> Notice of Informal Patent Application |
| Paper No(s)/Mail Date <u>15 December 2004</u> . | 6) <input type="checkbox"/> Other: _____ |

DETAILED ACTION

Election/Restrictions

1. Applicant's election with traverse of "Species 13," upon which applicant lists "Claims 1, 5, 6, 28-48, 50, 51 and 55" as corresponding thereto, in the reply filed on 10 August 2006 is acknowledged. The traversal is on the ground(s) that "the search for all pending claims together would not be burdensome, since the fields of search would likely overlap and pertinent art to the claims of the identified species would likely be found while searching each of the inventions individually." This argument, however, is not found to be persuasive because each of the various disclosed species details a mutually exclusive characteristic of a disk drive as evidenced by the description of each various species with a different preferred embodiment. A search for one of these mutually exclusive characteristics is not coextensive with a search for the other mutually exclusive characteristics and therefore searching for all mutually exclusive characteristics could not be done without serious burden.

The requirement is still deemed proper and is therefore made FINAL. Accordingly, claims 2-4, 7-27, 49, 52-54 and 56-62 are withdrawn from further consideration pursuant to 37 CFR 1.142(b) as being drawn to one or more non-elected inventions/species, there being no allowable generic or linking claim.

Priority

2. Acknowledgment is made of applicant's claim for foreign priority under 35 U.S.C. 119(a)-(d). The certified copies have been filed in parent Application No. PCT/JP03/0048, filed on 07 January 2003.

Drawings

3. The drawings were received on 09 July 2004. These drawings are accepted.

Specification

4. The title of the invention is not descriptive. A new title is required that is clearly indicative of the invention to which the claims are directed.
5. The disclosure is objected to because of the following informalities:
- a. In lines 3, 4, 9 and 10 of the abstract, each instance of "spindle motor 91" should be changed to --spindle motor 90-- in order to be consistent with the remainder of the disclosure.
 - b. In line 4 of claim 31, "at lease" should be corrected to read --at least--.

Appropriate correction is required.

6. The lengthy specification has not been checked to the extent necessary to determine the presence of all possible minor errors. Applicant's cooperation is requested in correcting any errors of which applicant may become aware in the specification.

Claim Objections

7. Claims 34, 36-40, 44, 45, 48, 50, 51 and 55 are objected to under 37 CFR 1.75(c) as being in improper form because a multiple dependent claim cannot depend from any other multiple dependent claim. Additionally, claims 36-40, 44 and 45 are objected to under 37 CFR 1.75(c) as being in improper form because a multiple dependent claim should refer to other claims in the alternative only. See MPEP § 608.01(n). Accordingly, claims 34, 36-40, 44, 45, 48, 50, 51 and 55 have not been further treated on the merits.

Claim Rejections - 35 USC § 112

8. The following is a quotation of the second paragraph of 35 U.S.C. 112:

The specification shall conclude with one or more claims particularly pointing out and distinctly claiming the subject matter which the applicant regards as his invention.

9. Claims 28/5, 28/6, 30, 32/30 and 33 are rejected under 35 U.S.C. 112, second paragraph, as being indefinite for failing to particularly point out and distinctly claim the subject matter which applicant regards as the invention.

a. In lines 5-6 of claim 28 (when dependent upon claim 5), it is indefinite as to whether "said positioning hole" refers to that set forth in line 4 of base claim 5, or that set forth in line 2 of claim 28.

b. In lines 5-6 of claim 28 (when dependent upon claim 6), it is indefinite as to whether "said positioning hole" refers to that set forth in line 4 of base claim 6, or that set forth in line 2 of claim 28.

c. In lines 2 and 2-3 of claim 30, each instance of "said traverse holder" is indefinite because it lacks clear and/or positive antecedent basis.

d. In line 5 of claim 33, "the same cam mechanism" is indefinite because it lacks clear and/or positive antecedent basis.

e. Claim 32 (when dependent upon claim 30) inherits the indefiniteness associated with base claim 30 and stands rejected as well.

Claim Rejections - 35 USC § 102

10. The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless –

(b) the invention was patented or described in a printed publication in this or a foreign country or in public use or on sale in this country, more than one year prior to the date of application for patent in the United States.

11. Claims 1 and 41/1 are rejected under 35 U.S.C. 102(b) as being anticipated by Ota et al. (US 5,777,978).

Ota teaches a disk drive (100) comprising disk rotating means (includes 56, for instance, in at least an equivalent structural sense) which mounts and rotates a disk (D); a traverse base (40) which holds the disk rotating means; a damper member (37 or 39) which flexibly holds the traverse base; a main unit (30) which holds the traverse base through the damper member; a tray (104) which mounts a cartridge (lines 23-25 in column 25, for instance) which houses a disk (D); and driving means (includes 115, for instance, in at least an equivalent structural sense) which loads or ejects the tray and accordingly moves the disk in the cartridge close to or away from the disk rotating means, wherein the cartridge is supported by the main unit through the tray [as per claim 1]; wherein the disk drive further comprises holding means (includes 33, for instance, in at least an equivalent structural sense) which holds the tray between a loading position and an ejection position in such a manner that the tray can be transported linearly [as per claim 41/1].

Claim Rejections - 35 USC § 103

12. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

13. This application currently names joint inventors. In considering patentability of the claims under 35 U.S.C. 103(a), the examiner presumes that the subject matter of the various claims was commonly owned at the time any inventions covered therein were made absent any evidence to the contrary. Applicant is advised of the obligation

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under 37 CFR 1.56 to point out the inventor and invention dates of each claim that was not commonly owned at the time a later invention was made in order for the examiner to consider the applicability of 35 U.S.C. 103(c) and potential 35 U.S.C. 102(e), (f) or (g) prior art under 35 U.S.C. 103(a).

14. Claims 5-6, 28-33, 35, 41/5, 41/6, 42-43 and 46-47 are rejected under 35 U.S.C. 103(a) as being unpatentable over Ota et al. (US 5,777,978).

Ota teaches the disk drive as detailed in paragraph 11, supra. Ota, however, remains silent as to the disk drive further comprising a cartridge positioning member/means, a cartridge urging member, a cartridge state detecting means, a shutter opening/closing means and a cartridge holding means.

Official notice is taken of the fact that it is notoriously old and well known in the art to have a disk drive further comprise a cartridge positioning member/means, a cartridge urging member, a cartridge state detecting means, and a cartridge holding means in the same field of endeavor for the purpose of enabling reliable cartridge loading. Official notice is also taken of the fact that it is notoriously old and well known in the art to have a disk drive further comprise a shutter opening/closing means in the same field of endeavor for the purpose of enabling disk access when inside the disk drive while offering disk protection when ejected outside the disk drive. It would have been obvious to a person having ordinary skill in the art at the time the invention was made to have had the disk drive of Ota further comprise a cartridge positioning member/means, a cartridge urging member, a cartridge state detecting means, a shutter opening/closing means and a cartridge holding means. The rationale is as follows:

One of ordinary skill in the art would have been motivated to have had the disk drive of Ota further comprise a cartridge positioning member/means, a cartridge urging member, a cartridge state detecting means, and a cartridge holding means since such enables reliable cartridge loading.

One of ordinary skill in the art would have been motivated to have had the disk drive of Ota further comprise a shutter opening/closing means since such enables disk access when inside the disk drive while offering disk protection when ejected outside the disk drive.

Pertinent Prior Art


15. The prior art made of record and not relied upon is considered pertinent to applicant's disclosure. This includes Ishimatsu et al. (US 5,956,314), which teaches a disk drive with a damper member (101, for instance) and a tray (line 28 in column 1, for instance); Ariyoshi et al. (WO 02/23546 A1), which teaches a disk drive with a damper member (29, for instance) and a tray (55); Kawamura et al. (US 5,812,511) and Seo et al. (US 2002/0097657), which each individually teaches a disk drive with a tray and a cartridge positioning/state detecting member; Ahn (US 2001/0010674), which teaches a disk drive with a tray and a cam member; and Sato et al. (JP 09-251-696), which teaches a disk drive having a tray with no front wall.

Conclusion

16. Any inquiry concerning this communication or earlier communications from the examiner should be directed to Craig A. Renner whose telephone number is (571) 272-7580. The examiner can normally be reached on Monday-Tuesday & Thursday-Friday 9:00 AM - 7:30 PM.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Hoa T. Nguyen can be reached on (571) 272-7579. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free). If you would like assistance from a USPTO Customer Service Representative or access to the automated information system, call 800-786-9199 (IN USA OR CANADA) or 571-272-1000.


Craig A. Renner
Primary Examiner
Art Unit 2627

CAR